

Actuarial Valuation Data by Year

Correctional State Employees Retirement Plan

(MSRS-Correctional)

	FY2018		FY2017		FY2016		FY2015		FY2014		FY2013		FY2012	
Membership														
Active Members		4,650		4,579		4,521		4,449		4,504		4,384		4,276
Service Retirees		2,736		2,576		2,426		2,292		2,075		1,920		1,773
Disabilitants		297		292		284		279		268		258		244
Survivors		226		216		208		198		174		196		180
Deferred Retirees		1,347		1,310		1,316		1,276		1,232		1,196		1,180
Nonvested Former Members		<u>843</u>		<u>818</u>		<u>661</u>		<u>531</u>		<u>384</u>		<u>413</u>		<u>473</u>
Total Membership		10,099		9,791		9,416		9,025		8,637		8,367		8,126
Funded Status														
Accrued Liability		\$1,490,521,000		\$1,414,443,000		\$1,313,516,000		\$1,239,258,000		\$1,122,474,000		\$1,026,098,000		\$968,166,000
Current Assets		<u>\$1,092,719,000</u>		<u>\$1,013,173,000</u>		<u>\$937,000,000</u>		<u>\$878,624,000</u>		<u>\$790,304,000</u>		<u>\$701,091,000</u>		<u>\$663,713,000</u>
Unfunded Accrued Liability		\$397,802,000		\$401,270,000		\$376,516,000		\$360,634,000		\$332,170,000		\$325,007,000		\$304,453,000
Funding Ratio	73.31%		71.63%		71.34%		70.90%		70.41%		68.33%		68.55%	
Financing Requirements														
Covered Payroll		\$267,975,000		\$258,003,000		\$247,876,000		\$235,436,000		\$227,008,000		\$212,972,000		\$212,056,000
Benefits Payable		\$67,622,000		\$63,221,000		\$59,045,000		\$54,909,000		\$50,842,000		\$46,226,000		\$42,571,000
Normal Cost	16.76%	\$44,912,000	16.62%	\$42,880,000	16.32%	\$40,455,000	16.43%	\$38,682,000	16.10%	\$36,548,000	15.60%	\$33,223,000	15.66%	\$33,206,000
Administrative Expenses	0.32%	\$858,000	0.35%	\$903,000	0.38%	\$942,000	0.32%	\$753,000	0.31%	\$704,000	0.33%	\$703,000	0.27%	\$573,000
Amortiz. of Unfunded Liab.^	<u>8.69%</u>	<u>\$23,287,000</u>	<u>11.43%</u>	<u>\$29,490,000</u>	<u>10.86%</u>	<u>\$26,919,000</u>	<u>10.66%</u>	<u>\$25,097,000</u>	<u>10.02%</u>	<u>\$22,746,000</u>	<u>10.18%</u>	<u>\$21,681,000</u>	<u>9.35%</u>	<u>\$19,827,000</u>
Total Requirements	25.77%	\$69,057,000	28.40%	\$73,273,000	27.56%	\$68,316,000	27.41%	\$64,532,000	26.43%	\$59,998,000	26.11%	\$55,607,000	25.28%	\$53,606,000
Employee Contributions	9.60%	\$25,726,000	9.10%	\$23,478,000	9.10%	\$22,557,000	9.10%	\$21,425,000	9.10%	\$20,658,000	8.60%	\$18,316,000	8.60%	\$18,237,000
Employer Contributions	14.40%	\$38,588,000	12.85%	\$33,153,000	12.85%	\$31,852,000	12.85%	\$30,254,000	12.85%	\$29,171,000	12.10%	\$25,770,000	12.10%	\$25,659,000
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Direct State Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Other Govt. Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Administrative Assessment	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>
Total Contributions	24.00%	\$64,314,000	21.95%	\$56,631,000	21.95%	\$54,409,000	21.95%	\$51,679,000	21.95%	\$49,829,000	20.70%	\$44,086,000	20.70%	\$43,896,000
Total Requirements	25.77%	\$69,057,000	28.40%	\$73,273,000	27.56%	\$68,316,000	27.41%	\$64,532,000	26.43%	\$59,998,000	26.11%	\$55,607,000	25.28%	\$53,606,000
Total Contributions	<u>24.00%</u>	<u>\$64,314,000</u>	<u>21.95%</u>	<u>\$56,631,000</u>	<u>21.95%</u>	<u>\$54,409,000</u>	<u>21.95%</u>	<u>\$51,679,000</u>	<u>21.95%</u>	<u>\$49,829,000</u>	<u>20.70%</u>	<u>\$44,086,000</u>	<u>20.70%</u>	<u>\$43,896,000</u>
Sufficiency/(Deficiency)	(1.77%)	(\$4,743,000)	(6.45%)	(\$16,642,000)	(5.61%)	\$13,907,000	(5.46%)	\$12,853,000	(4.48%)	\$10,169,000	(5.41%)	(\$11,521,000)	(4.58%)	(\$9,710,000)
Amortization Target Date	2048		2038		2038		2038		2038		2038		2038	
Actuary	GRS		GRS		GRS		GRS		GRS		GRS		GRS	

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

The information set forth in this report is a compilation of data taken from actuarial valuation reports prepared by each plan's actuary. The LCPR or its staff do not warrant or guarantee its accuracy, reliability or completeness. LCPR staff compiles this information to provide a single source for similar data on the plans, for the sake of convenience and ease of comparison, for use by Minnesota legislators and, secondarily, the public. This information should not be relied on for any "official" purpose. Please refer to the plans' actuarial valuation reports, available on the LCPR website at www.lcpr.leg.mn, for the most accurate, complete and detailed information.

Actuarial Valuation Data by Year

Correctional State Employees Retirement Plan

(MSRS-Correctional)

	FY2011	FY2010	FY2009	FY2008	FY2007	FY2006	2005
Membership							
Active Members	4,322	4,268	4,403	4,520	4,332	3,910	3,607
Service Retirees	1,621	1,505	1,381	1,293	1,210	1,101	1,025
Disabilitants	230	206	194	184	174	168	150
Survivors	165	148	134	123	118	106	104
Deferred Retirees	1,035	993	949	888	851	817	738
Nonvested Former Members	501	585	626	548	494	388	351
Total Membership	7,874	7,705	7,687	7,556	7,179	6,490	5,975
Funded Status							
Accrued Liability	\$907,012,000	\$851,086,000	\$821,250,000	\$760,363,000	\$708,291,710	\$647,480,269	\$546,117,680
Current Assets	<u>\$637,027,000</u>	<u>\$603,863,000</u>	<u>\$590,339,000</u>	<u>\$572,719,000</u>	* <u>\$559,851,700</u>	<u>\$535,356,819</u>	<u>\$503,573,272</u>
Unfunded Accrued Liability	\$269,985,000	\$247,223,000	\$230,911,000	\$187,644,000	\$148,440,010	\$112,123,450	\$42,544,408
Funding Ratio	70.23%	70.95%	71.88%	75.32%	79.04%	82.68%	92.21%
Financing Requirements							
Covered Payroll	\$205,608,000	\$205,574,000	\$208,388,000	\$205,537,000	\$187,309,014	\$162,744,640	\$147,385,402
Benefits Payable	\$39,116,000	\$36,078,000	\$33,239,000	\$30,932,000	\$28,564,915	\$26,506,726	\$19,025,766
Normal Cost	17.89% \$36,793,000	18.09% \$37,188,000	18.22% \$37,970,000	18.24% \$37,500,000	17.68% \$33,124,289	17.69% \$28,786,714	15.01% \$22,111,459
Administrative Expenses	0.17% \$350,000	0.22% \$452,000	0.20% \$417,000	0.22% \$452,000	0.22% \$412,080	0.21% \$341,764	0.20% \$294,771
Amortiz. of Unfunded Liab.^	7.94% <u>\$16,325,000</u>	7.12% <u>\$14,637,000</u>	6.43% <u>\$13,399,000</u>	5.20% <u>\$10,688,000</u>	6.54% <u>\$12,250,010</u>	5.44% <u>\$8,853,309</u>	2.50% <u>\$3,684,635</u>
Total Requirements	26.00% \$53,468,000	25.43% \$52,277,000	24.85% \$51,786,000	23.66% \$48,640,000	24.44% \$45,786,379	23.34% \$37,981,787	17.71% \$26,090,865
Employee Contributions	8.60% \$17,682,000	8.60% \$17,679,000	7.70% \$16,046,000	7.00% \$14,388,000	6.40% \$11,987,777	5.69% \$9,260,170	5.69% \$8,386,229
Employer Contributions	12.10% \$24,879,000	12.10% \$24,875,000	11.10% \$23,131,000	10.10% \$20,759,000	9.10% \$17,045,120	7.98% \$12,987,022	7.98% \$11,761,355
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Total Contributions	20.70% \$42,561,000	20.70% \$42,554,000	18.80% \$39,177,000	17.10% \$35,147,000	15.50% \$29,032,897	13.67% \$22,247,192	13.67% \$20,147,584
Total Requirements	26.00% \$53,468,000	25.43% \$52,277,000	24.85% \$51,786,000	23.66% \$48,640,000	24.44% \$45,786,379	23.34% \$37,981,787	17.71% \$26,090,865
Total Contributions	<u>20.70%</u> <u>\$42,561,000</u>	<u>20.70%</u> <u>\$42,554,000</u>	<u>18.80%</u> <u>\$39,177,000</u>	<u>17.10%</u> <u>\$35,147,000</u>	<u>15.50%</u> <u>\$29,032,897</u>	<u>13.67%</u> <u>\$22,247,192</u>	<u>13.67%</u> <u>\$20,147,584</u>
Sufficiency/(Deficiency)	(5.30%) (\$10,907,000)	(4.73%) (\$9,723,000)	(6.05%) (\$12,609,000)	(6.56%) (\$13,493,000)	(8.94%) (\$16,753,482)	(9.67%) (\$15,734,595)	(4.04%) (\$5,943,281)
Amortization Target Date	2038	2038	2038	2038	2023	2023	2020
Actuary	Mercer	Mercer	Mercer	Mercer	Segal	Segal	Segal

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

* Reflects 2007 Asset Valuation Method change

Actuarial Valuation Data by Year

Correctional State Employees Retirement Plan

(MSRS-Correctional)

	2004	2003	2002	2001	2000	1999	1998
Membership							
Active Members	3,326	3,262	3,249	3,182	3,098	2,882	2,817
Service Retirees	943	843	754	655	616	542	503
Disabilitants	154	135	115	92	75	60	49
Survivors	91	82	69	61	56	50	39
Deferred Retirees	678	601	550	483	419	337	291
Nonvested Former Members	<u>339</u>	<u>340</u>	<u>268</u>	<u>220</u>	<u>163</u>	<u>135</u>	<u>114</u>
Total Membership	5,531	5,263	5,005	4,693	4,427	4,006	3,813
Funded Status							
Accrued Liability	\$524,215,028	\$484,974,000	\$446,426,000	\$398,633,000	\$359,885,000	\$307,408,000	\$261,869,000
Current Assets	<u>\$486,617,032</u>	<u>\$470,716,000</u>	<u>\$457,416,000</u>	<u>\$431,134,000</u>	<u>\$386,964,000</u>	<u>\$335,408,000</u>	<u>\$295,291,000</u>
Unfunded Accrued Liability	\$37,597,996	\$14,258,000	(\$10,990,000)	(\$32,501,000)	(\$27,079,000)	(\$28,000,000)	(\$33,422,000)
Funding Ratio	92.83%	97.06%	102.46%	108.15%	107.52%	109.11%	112.76%
Financing Requirements							
Covered Payroll	\$134,117,624	\$138,518,000	\$131,232,000	\$127,835,000	\$127,557,000	\$112,202,000	\$106,178,000
Benefits Payable	\$17,265,693	\$17,276,000	\$17,105,000	\$14,911,000	\$12,414,000	\$10,190,000	\$8,226,000
Normal Cost	14.96% \$20,066,740	15.04% \$20,857,000	14.97% \$19,646,000	14.99% \$19,161,000	14.64% \$18,670,000	14.85% \$16,664,000	14.88% \$15,789,000
Administrative Expenses	0.20% \$268,235	0.22% \$305,000	0.21% \$276,000	0.19% \$243,000	0.22% \$281,000	0.15% \$168,000	0.17% \$181,000
Amortiz. of Unfunded Liab.^	<u>2.31%</u> <u>\$3,098,117</u>	<u>0.57%</u> <u>\$790,000</u>	<u>(0.45%)</u> <u>(\$591,000)</u>	<u>(1.37%)</u> <u>(\$1,751,000)</u>	<u>(1.14%)</u> <u>(\$1,454,000)</u>	<u>(1.69%)</u> <u>(\$1,896,000)</u>	<u>(2.06%)</u> <u>(\$2,187,000)</u>
Total Requirements	17.47% \$23,433,092	15.83% \$21,952,000	14.73% \$19,331,000	13.81% \$17,653,000	13.72% \$17,497,000	13.31% \$14,936,000	12.99% \$13,783,000
Employee Contributions	5.69% \$7,631,293	5.69% \$7,882,000	5.69% \$7,467,000	5.69% \$7,274,000	5.69% \$7,258,000	5.69% \$6,384,000	5.50% \$5,840,000
Employer Contributions	7.98% \$10,702,586	7.98% \$11,054,000	7.98% \$10,472,000	7.98% \$10,201,000	7.98% \$10,179,000	7.98% \$8,954,000	7.70% \$8,176,000
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>
Total Contributions	13.67% \$18,333,879	13.67% \$18,936,000	13.67% \$17,939,000	13.67% \$17,475,000	13.67% \$17,437,000	13.67% \$15,338,000	13.20% \$14,016,000
Total Requirements	17.47% \$23,433,092	15.83% \$21,952,000	14.73% \$19,331,000	13.81% \$17,653,000	13.72% \$17,497,000	13.31% \$14,936,000	12.99% \$13,783,000
Total Contributions	<u>13.67%</u> <u>\$18,333,879</u>	<u>13.67%</u> <u>\$18,936,000</u>	<u>13.67%</u> <u>\$17,939,000</u>	<u>13.67%</u> <u>\$17,475,000</u>	<u>13.67%</u> <u>\$17,437,000</u>	<u>13.67%</u> <u>\$15,338,000</u>	<u>13.20%</u> <u>\$14,016,000</u>
Sufficiency/(Deficiency)	(3.80%) (\$5,099,213)	(2.16%) (\$3,016,000)	(1.06%) (\$1,392,000)	(0.14%) (\$178,000)	(0.05%) (\$60,000)	0.36% \$402,000	0.21% \$233,000
Amortization Target Date	2020	2032	2032	2031	2030	2020	2020
Actuary	Segal	Milliman USA	Milliman USA	Milliman USA	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

Correctional State Employees Retirement Plan

(MSRS-Correctional)

	1997	1996	1995	1994	1993	1992	1991
Membership							
Active Members	2,600	2,264	2,117	1,761	1,618	1,573	1,467
Service Retirees	444	413	399	393	374	363	358
Disabilitants	39	33	25	21	20	17	12
Survivors	36	27	25	17	15	14	13
Deferred Retirees	282	324	296	248	225	181	157
Nonvested Former Members	90	84	74	44	51	44	48
Total Membership	3,491	3,145	2,936	2,484	2,303	2,192	2,055
Funded Status							
Accrued Liability	\$212,638,000	\$170,959,000	\$153,491,000	\$152,702,000	\$134,939,000	\$123,515,000	\$112,171,000
Current Assets	<u>\$241,916,000</u>	<u>\$193,833,000</u>	<u>\$165,427,000</u>	<u>\$148,163,000</u>	<u>\$135,939,000</u>	<u>\$121,051,000</u>	<u>\$105,926,000</u>
Unfunded Accrued Liability	(\$29,278,000)	(\$22,874,000)	(\$11,936,000)	\$4,539,000	(\$1,000,000)	\$2,464,000	\$6,245,000
Funding Ratio	113.77%	113.38%	107.78%	97.02%	101.24%	98.01%	94.43%
Financing Requirements							
Covered Payroll	\$91,847,000	\$78,030,000	\$71,022,000	\$70,562,000	\$60,330,000	\$56,044,000	\$50,821,000
Benefits Payable	\$6,267,000	\$5,460,000	\$4,971,000	\$4,557,000	\$4,150,000	\$3,773,000	\$3,493,000
Normal Cost	14.34% \$13,162,000	11.05% \$8,622,315	10.96% \$7,784,011	10.81% \$7,627,752	10.82% \$6,527,706	10.74% \$6,019,126	9.81% \$4,985,540
Administrative Expenses	0.18% \$165,000	0.16% \$124,848	0.15% \$106,533	0.17% \$119,955	0.15% \$90,495	0.46% \$257,802	0.44% \$223,612
Amortiz. of Unfunded Liab.^	<u>(2.03%) (\$1,864,000)</u>	<u>0.00% \$0</u>	<u>0.00% \$0</u>	<u>0.32% \$225,798</u>	<u>0.00% \$0</u>	<u>0.21% \$117,692</u>	<u>0.57% \$289,680</u>
Total Requirements	12.49% \$11,463,000	11.21% \$8,747,163	11.11% \$7,890,544	11.30% \$7,973,506	10.97% \$6,618,201	11.41% \$6,394,620	10.82% \$5,498,832
Employee Contributions	5.50% \$5,052,000	4.90% \$3,823,470	4.90% \$3,480,078	4.90% \$3,457,538	4.90% \$2,956,170	4.90% \$2,746,156	4.90% \$2,490,229
Employer Contributions	7.70% \$7,072,000	6.27% \$4,892,481	6.27% \$4,453,079	6.27% \$4,424,237	6.27% \$3,782,691	6.27% \$3,513,959	6.27% \$3,186,477
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00% \$0</u>	<u>0.00% \$0</u>	<u>0.00% \$0</u>	<u>0.00% \$0</u>	<u>0.00% \$0</u>	<u>0.00% \$0</u>	<u>0.00% \$0</u>
Total Contributions	13.20% \$12,124,000	11.17% \$8,715,951	11.17% \$7,933,157	11.17% \$7,881,775	11.17% \$6,738,861	11.17% \$6,260,115	11.17% \$5,676,706
Total Requirements	12.49% \$11,463,000	11.21% \$8,747,163	11.11% \$7,890,544	11.30% \$7,973,506	10.97% \$6,618,201	11.41% \$6,394,620	10.82% \$5,498,832
Total Contributions	<u>13.20%</u> <u>\$12,124,000</u>	<u>11.17%</u> <u>\$8,715,951</u>	<u>11.17%</u> <u>\$7,933,157</u>	<u>11.17%</u> <u>\$7,881,775</u>	<u>11.17%</u> <u>\$6,738,861</u>	<u>11.17%</u> <u>\$6,260,115</u>	<u>11.17%</u> <u>\$5,676,706</u>
Sufficiency/(Deficiency)	0.71% \$661,000	(0.04%) (\$31,212)	0.06% \$42,613	(0.13%) (\$91,731)	0.20% \$120,660	(0.24%) (\$134,506)	0.35% \$177,873
Amortization Target Date	2020	2020	2020	2020	2020	2020	2020
Actuary	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

Correctional State Employees Retirement Plan

(MSRS-Correctional)

	1990	1989	1988	1987	1986	1985	1984
Membership							
Active Members	1,416	1,317	1,267	1,232	1,220	1,191	1,174
Service Retirees	340	337	328	313	309	309	326
Disabilitants	9	8	6	11	11	12	0
Survivors	15	12	12	9	8	8	0
Deferred Retirees	113	58	47	43	35	30	25
Nonvested Former Members	45	57	80	84	83	79	95
Total Membership	1,938	1,789	1,740	1,692	1,666	1,629	1,620
Funded Status							
Accrued Liability	\$102,217,000	\$92,684,000	\$81,454,000	\$72,081,000	\$59,042,000	\$53,345,000	\$43,887,970
Current Assets	<u>\$96,945,000</u>	<u>\$85,441,000</u>	<u>\$74,065,000</u>	<u>\$67,488,000</u>	<u>\$56,894,000</u>	<u>\$48,568,000</u>	<u>\$40,152,963</u>
Unfunded Accrued Liability	\$5,272,000	\$7,243,000	\$7,389,000	\$4,593,000	\$2,148,000	\$4,777,000	\$3,735,007
Funding Ratio	94.84%	92.19%	90.93%	93.63%	96.36%	91.04%	91.49%
Financing Requirements							
Covered Payroll	\$47,075,000	\$41,976,000	\$38,807,000	\$35,155,000	\$33,561,000	\$31,055,000	\$26,993,968
Benefits Payable	\$3,188,000	\$2,964,000	\$2,678,000	\$1,951,829	\$1,681,000	\$1,647,000	\$1,942,689
Normal Cost	9.67% \$4,552,153	9.70% \$4,071,672	9.24% \$3,585,767	9.26% \$3,255,353	7.98% \$2,678,168	7.92% \$2,459,556	9.49% \$2,561,728
Administrative Expenses	0.56% \$263,620	0.41% \$172,102	0.30% \$116,421	0.27% \$94,919	0.27% \$90,615	0.28% \$86,954	0.18% \$48,589
Amortiz. of Unfunded Liab.^	<u>0.50%</u> <u>\$235,375</u>	<u>0.76%</u> <u>\$319,018</u>	<u>0.83%</u> <u>\$322,098</u>	<u>0.55%</u> <u>\$193,353</u>	<u>0.32%</u> <u>\$107,395</u>	<u>0.75%</u> <u>\$232,913</u>	<u>0.66%</u> <u>\$178,160</u>
Total Requirements	10.73% \$5,051,148	10.87% \$4,562,791	10.37% \$4,024,286	10.08% \$3,543,624	8.57% \$2,876,178	8.95% \$2,779,423	10.33% \$2,788,477
Employee Contributions	4.90% \$2,306,675	4.90% \$2,056,824	4.90% \$1,901,543	4.90% \$1,722,595	4.90% \$1,644,489	4.90% \$1,521,695	4.90% \$1,322,704
Employer Contributions	6.27% \$2,951,603	8.70% \$3,651,912	8.70% \$3,376,209	8.70% \$3,058,485	8.70% \$2,919,807	8.70% \$2,701,785	8.70% \$2,348,475
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>						
Total Contributions	11.17% \$5,258,278	13.60% \$5,708,736	13.60% \$5,277,752	13.60% \$4,781,080	13.60% \$4,564,296	13.60% \$4,223,480	13.60% \$3,671,180
Total Requirements	10.73% \$5,051,148	10.87% \$4,562,791	10.37% \$4,024,286	10.08% \$3,543,624	8.57% \$2,876,178	8.95% \$2,779,423	10.33% \$2,788,477
Total Contributions	<u>11.17%</u> <u>\$5,258,278</u>	<u>13.60%</u> <u>\$5,708,736</u>	<u>13.60%</u> <u>\$5,277,752</u>	<u>13.60%</u> <u>\$4,781,080</u>	<u>13.60%</u> <u>\$4,564,296</u>	<u>13.60%</u> <u>\$4,223,480</u>	<u>13.60%</u> <u>\$3,671,180</u>
Sufficiency/(Deficiency)	0.44% \$207,130	2.73% \$1,145,945	3.23% \$1,253,466	3.52% \$1,237,456	5.03% \$1,688,118	4.65% \$1,444,058	3.27% \$882,703
Amortization Target Date	2020	2020	2017	2017	2010	2010	2010
Actuary	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt	Touche Ross

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

Correctional State Employees Retirement Plan

(MSRS-Correctional)

	1983	1982	1981	1980	1979	1978	1977	
Membership								
Active Members	1,124	1,010	965	990	964	995	932	
Service Retirees	295	293	275	247	225	211	197	
Disabilitants	0	0	0	7	5	3	3	
Survivors	0	0	0	3	2	2	1	
Deferred Retirees	12	10	5	7	7	3	1	
Nonvested Former Members	27	39	38	0	0	0	0	
Total Membership	1,458	1,352	1,283	1,254	1,203	1,214	1,134	
Funded Status								
Accrued Liability	\$39,550,404	\$34,519,532	\$29,876,042	\$29,259,602	\$25,331,420	\$26,353,129	\$23,940,039	
Current Assets	<u>\$36,067,783</u>	<u>\$30,400,184</u>	<u>\$26,284,198</u>	<u>\$22,178,309</u>	<u>\$18,596,210</u>	<u>\$18,100,000</u>	<u>\$16,400,000</u>	
Unfunded Accrued Liability	\$3,482,621	\$4,119,348	\$3,591,844	\$7,081,293	\$6,735,210	\$8,253,129	\$7,540,039	
Funding Ratio	91.19%	88.07%	87.98%	75.80%	73.41%	68.68%	68.50%	
Financing Requirements								
Covered Payroll	\$24,511,088	\$20,431,200	\$18,264,697	\$16,151,502	\$15,199,761	\$14,828,207	\$12,399,810	
Benefits Payable	\$1,596,030	\$1,566,286	\$1,357,965	\$1,222,560	\$1,086,351	\$1,005,437	\$911,040	
Normal Cost	10.62%	\$2,603,078	10.52%	\$2,149,362	10.64%	\$1,556,456	11.02%	\$1,634,068
Administrative Expenses	0.18%	\$44,120	0.18%	\$36,776	0.18%	\$29,073	0.14%	\$20,759
Amortiz. of Unfunded Liab.^	<u>0.95%</u>	<u>\$232,855</u>	<u>1.34%</u>	<u>\$273,778</u>	<u>2.78%</u>	<u>\$434,713</u>	<u>4.76%</u>	<u>\$705,823</u>
Total Requirements	11.75%	\$2,880,053	12.04%	\$2,459,916	13.60%	\$2,012,448	15.92%	\$2,360,651
Employee Contributions	4.89%	\$1,198,592	4.50%	\$919,404	6.00%	\$969,090	6.00%	\$889,692
Employer Contributions	7.34%	\$1,799,114	6.75%	\$1,379,106	9.00%	\$1,453,635	9.00%	\$1,334,539
Employer Add'l Cont.	4.08%	\$1,000,052	1.32%	\$269,692	5.00%	\$807,575	5.00%	\$741,410
Direct State Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Other Govt. Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Administrative Assessment	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>
Total Contributions	16.31%	\$3,997,758	12.57%	\$2,568,202	20.00%	\$3,230,300	20.00%	\$2,965,641
Total Requirements	11.75%	\$2,880,053	12.04%	\$2,459,916	13.60%	\$2,196,604	15.92%	\$2,360,651
Total Contributions	<u>16.31%</u>	<u>\$3,997,758</u>	<u>12.57%</u>	<u>\$2,568,202</u>	<u>20.00%</u>	<u>\$3,230,300</u>	<u>20.00%</u>	<u>\$2,965,641</u>
Sufficiency/(Deficiency)	4.56%	\$1,117,706	0.53%	\$108,285	6.40%	\$1,033,696	4.08%	\$604,991
Amortization Target Date	2010	2010	2009	2009	2009	1997	1997	
Actuary	Touche Ross	Touche Ross	Touche Ross	Wyatt	Wyatt	TPF&C	TPF&C	

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

Correctional State Employees Retirement Plan

(MSRS-Correctional)

	1976	1975	1974	1973
Membership				
Active Members	926	901	737	677
Service Retirees	162	107	17	0
Disabilitants	2	0	0	0
Survivors	0	0	0	0
Deferred Retirees	1	0	0	0
Nonvested Former Members	0	0	0	0
Total Membership	1,091	1,008	754	677
Funded Status				
Accrued Liability	\$23,063,989	\$18,790,688	\$16,387,147	\$10,613,186
Current Assets	<u>\$14,400,000</u>	<u>\$9,700,000</u>	<u>\$5,500,000</u>	<u>\$3,300,000</u>
Unfunded Accrued Liability	\$8,663,989	\$9,090,688	\$10,887,147	\$7,313,186
Funding Ratio	62.43%	51.62%	33.56%	31.09%
Financing Requirements				
Covered Payroll	\$11,733,927	\$9,922,071	\$7,440,827	\$6,062,311
Benefits Payable	\$744,492	\$538,573	\$92,665	\$0
Normal Cost	10.78% \$1,264,917	10.79% \$1,070,591	10.72% \$797,657	11.92% \$722,627
Administrative Expenses	0.14% \$16,427	0.14% \$13,891	0.14% \$10,417	0.19% \$11,518
Amortiz. of Unfunded Liab.^	<u>5.39%</u> <u>\$632,459</u>	<u>6.28%</u> <u>\$623,106</u>	<u>9.66%</u> <u>\$718,784</u>	<u>7.85%</u> <u>\$475,891</u>
Total Requirements	16.31% \$1,913,803	17.21% \$1,707,588	20.52% \$1,526,858	19.96% \$1,210,037
Employee Contributions	6.00% \$704,036	6.00% \$595,324	6.00% \$446,450	6.00% \$363,739
Employer Contributions	9.00% \$1,056,053	9.00% \$892,986	9.00% \$669,674	9.00% \$545,608
Employer Add'l Cont.	5.00% \$586,696	5.00% \$496,104	5.00% \$372,041	5.00% \$303,116
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>
Total Contributions	20.00% \$2,346,785	20.00% \$1,984,414	20.00% \$1,488,165	20.00% \$1,212,462
Total Requirements	16.31% \$1,913,803	17.21% \$1,707,588	20.52% \$1,526,858	19.96% \$1,210,037
Total Contributions	<u>20.00%</u> <u>\$2,346,785</u>	<u>20.00%</u> <u>\$1,984,414</u>	<u>20.00%</u> <u>\$1,488,165</u>	<u>20.00%</u> <u>\$1,212,462</u>
Sufficiency/(Deficiency)	3.69% \$432,982	2.79% \$276,826	(0.52%) (\$38,692)	0.04% \$2,425
Amortization Target Date	1997	1997	1997	1997
Actuary	TPF&C	Little Church	Coates & Crawford	Coates & Crawford

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.